

This listing of claims replaces all prior versions, and listings of claims in the instant application:

**Listing of Claims:**

1-21. (Canceled)

22. (Previously presented) A system comprising:

a mixer;

a first gas source coupled to an inlet port of said mixer;

a second gas source coupled to said inlet port of said mixer;

a first regulator coupled between said inlet port of said mixer and said first gas source;

a second regulator coupled between said inlet port of said mixer and said second gas source;

a third regulator coupled to an outlet port of said mixer; and

a check valve coupled to said outlet port of said mixer and to an exhaust.

23-24. (Canceled)

25. (Previously presented) A system comprising:

a mixer;

a first gas source coupled to an inlet port of said mixer;

a second gas source coupled to said inlet port of said mixer;

a first regulator coupled between said inlet port of said mixer and said first gas source;

a second regulator coupled between said inlet port of said mixer and said second gas source;

a third regulator coupled to an outlet port of said mixer;

a check valve coupled to said outlet port of said mixer and to an exhaust, wherein a first flow of a process gas exits said mixer, wherein a second flow of said process gas passes through said third regulator, a difference between said first flow and said second flow being a third flow of said process gas which passes through said check valve.

26. (Previously presented) The system of Claim 22 wherein said first gas source is a dopant gas source and wherein said second gas source is a carrier gas source.

27. (Original) The system of Claim 22 wherein said first regulator regulates a flow rate of a flow of a first gas from said first gas source and wherein said second regulator regulates a flow rate of a flow of a second gas from said second gas source.

28. (Original) The system of Claim 27 wherein said first regulator and said second regulator are mass flow controllers.

29-36. (Canceled)

37. (Previously presented) A system comprising:  
a mixer;  
a first gas source coupled to an inlet port of said mixer;  
a second gas source coupled to said inlet port of said mixer, wherein a first process gas from said first process gas source and a second process gas from said second process gas source mix in said mixer;  
a first regulator coupled between said inlet port of said mixer and said first gas source;  
a second regulator coupled between said inlet port of said mixer and said second gas source;

a third regulator coupled to an outlet port of said mixer, said third regulator being a mass flow controller; and  
a check valve coupled to said outlet port of said mixer and to an exhaust.